the two-second type area. It is a minuscule component of that time.

Q We heard earlier, and we spoke about this a little bit, about the manual intervention required at the NYNEX office once a service order is received. In response to staff information request 1.6 NYNEX responded that all resellers' representatives' orders require manual intervention and that the same holds true for NYNEX representatives.

I just want to confirm the accuracy of that and also ask whether the type of manual intervention required is the same and if the increase in the interval, any increase in interval is going to be comparable by virtue of that manual intervention?

A (Butler) Let me just clarify the answer here for the record, and might help everybody else with that answer. We did say that all reseller orders require manual intervention. What we mean by that is up until just last weekend all of those orders would fall out to the reseller services center and then a reseller service representative would have to type it into our service order processor.

That's really the definition of that. At the same time we do not have in place today a

capability of a customer, an end user customer of NYNEX, to directly input their own order into the system, and, therefore, they call our business office, talk to one of our service representatives and that's what we mean by manual intervention by the service representative on a retail side; so all of those orders are also manually intervened on, if you will, just like they are in the reseller services center from that perspective.

Q I appreciate that clarification. I don't think that would have been necessarily understood. Has NYNEX undertaken to measure the delay because of the manual intervention on the orders from resellers? In other words, the time it takes to take the order and retype it into the system, how much time does that take if it's been measured?

A (Butler) No. We have not. Again, what we're wanting to measure is, rather, the interval that we provided to that--to the customer and to the reseller in turn and not necessarily our intervention.

If you will, in the reseller world, these are costs that we are supposed to be shedding as part of the process. To the degree we keep those costs

which cost more bearing in the process, we would just as soon drive to more flow through which is indicative of what we've done already or what we're doing right now.

JUDGE STEIN: Mr. Klein, you're running to the end of your time.

MR. KLEIN: Thank you, Judge.

Q Regarding that manual intervention is there any type of error rate which has been associated with that manual intervention?

A (Butler) No. I'm not aware of any error rate associated with our manual intervention versus the error rate that would be associated with the manual intervention in a retail world. I'm not aware of any comparison at all in fact.

Q Regarding that manual intervention, sticking with that for a moment, are you monitoring the volume of reseller service orders to determine what your work force needs are in response to the volume of orders being received and has that work force been augmented and do you expect that to continue to increase in the future?

A (Butler) Just bear with me for a second and let me turn to that answer. In the interrogatories

question 1.2 indicated the number of service orders that were submitted on every given day since October 8th up through last week. Indeed, we do monitor the number of service orders and the number of lines on those service orders, and we're in a position to augment the force within very reasonable times, for some of the same reasons that Mr. Dowel gave earlier for our outside forces.

I think, to reiterate, we're not really close to the capacity of the center but in addition to our own center we have the capability of brining in, already used, an out-sourcer in to gives us additional flexibility and that's also addressed in these answers.

Q We spoke earlier also about the attempt to increase the automation of the NYNEX service ordering processing system, and I'd just like to ask there is apparently a space on the GUI order form entitled "remarks", and I'm wondering if there are any services or features which can only be ordered through that remarks section of the form and how that might affect your plans to automate the system?

A (Miller) Yes; at present there are. I mean, one could--the analogy, the more data we can

get out of the remarks field into the other field the more we're able to automate a flow through, even with flow through, if there are comments in the remarks field that order is going to in fact be handled manually. Again, it is a cooperative issue here that we need the purity of the order is a very important issue when it puts flowing orders through the system.

Q How is that being--

A (Miller) Has that or--

Q Has it or how will it be?

A (Miller) It is modified in terms of the different services types that are being included in flow through and they are necessary data that support those orders being put into the fields. The fields are already in place. The editing process that look at those fields and it is a continual process and is going to be.

Q Speaking of edited process I think I've been edited. I'll stop here.

JUDGE STEIN: We reserved the last chunk of time to counsel for other parties. Are there some questions you would like to pose.

MR. DAVIDOW: AT&T has none.

JUDGE STEIN: Any takers?

(No response.)

Is there anything that's important to you that you like to pursue?

MR. KLEIN: If you give me 30 seconds to consult with staff, I'll see if there is anything we can wrap up with.

(Pause.)

Judge, I do have three questions that I would like to pose.

JUDGE STEIN: We have three questions. We will have three answers and we'll close for the day, and when we go off the record at 6:00, let's take a few minutes to plan how we want to use the balance of our time.

THE WITNESS: (Butler) Could I clarify a comment I made earlier if that's possible?

JUDGE STEIN: You want to clarify an answer?

THE WITNESS: (Butler) Yes, earlier to a question. I believe the question was how fast do you query back and I said same day, and that's slightly incorrect, so let me correct it for the record.

It is same day if the order is received

before noon. It could potentially be next day before noon. From Mr. Miller's answer, if the order was received after 12 noon, so indeed it could be in some cases the next day.

Also as a point of clarification to another item, it wasn't really misunderstood but let me just bring it up just for clarification: If we query back to a reseller we will stop the clock. If it is an error back to the reseller and then if they fix it that the clock will begin to start again; in other words, they will have to pick another due date.

MR. KLEIN: Okay.

JUDGE BRILLING: Can I ask another point of clarification before you do that? Mr. Miller, did you agree to provide some numbers to staff on the numbers of notifications? Did you ask him that question?

MR. KLEIN: On numbers of notifications to competitors?

THE WITNESS: (Miller) I don't recall that.

JUDGE BRILLING: You asked him about ten minutes to provide some information.

MR. KLEIN: I didn't write it down.

JUDGE BRILLING: Never mind.

JUDGE STEIN: I've been concerned about this, also. Let me go off the record.

(Discussion off the record.)

Back on.

Did you want to clarify an answer or are you done?

THE WITNESS: (Butler) I'm done.

JUDGE STEIN: Mr. Klein, three questions.

BY MR. KLEIN:

Q Suppose a reseller or carrier service order has been received and confirmed by New York Tel but the company, New York Tel, then discovers that it can't complete that service on the date promised or the time promised? How is that information conveyed back to the reseller or the carrier?

A (Butler) I'd like to take that question and just get back to you with the answer. I'm not exactly sure of the answer right now.

Q Unless any competitor have a experience with that situation I'm not sure if anyone else could elucidate us on that. Okay.

Regarding the time periods in which resellers and carriers can provide, can transmit

service orders to New York Tel, what hours of availability are they? Can they transmit orders 24 hours a day or 7 days a week or is there some limitation on that and subsequently on the processing of those orders?

A (Miller) Basically, at the present time if they're issuing those orders through the DCAS, it is up 21 by 6:00 a.m. in the morning to 3:00 a.m. the following morning 7 days a week.

Q And then turning those orders around and placing them into the NYNEX system, during what hours is that done?

A (Miller) I think that's normal business day, 8:00 till 6:00.

MR. KLEIN: That's all I have, Your Honor.

A (Dowell) Could I answer the question that Gary deferred on what happens if we get missed appointments? The vast majority of missed appointments is caused by dispatch operation and what happens there is they enter a system called "work and force administration" WFA and out of WFA we pull a series of reports that are sent to a CAT and CATC and resale center that identify those missed appointments and that information is relayed back to the CLECs to

either renegotiate an appointment i.e. if access was denied or if it is a help for; what timeframe do we think we can get that order.

Q What's the interval for getting back to the reseller on that?

A (Dowell) It is supposed to be the same day.

A (Kennedy) Our experience is that it is typically the next business day.

JUDGE STEIN: All right.

MR. KLEIN: Thank you.

JUDGE STEIN: With that we'll close for today. We'll chat for a few minutes off the record about the rest of the schedule and we'll reconvene tomorrow morning at 9:00.

(Recessed at 5:55 p.m.)

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the matter of	)	
	)	
Application of New York Telephone Company	)	
Pursuant to Section	)	CC Docket No. _____
271 of the Telecommunications	)	
Act of 1996 to Provide	)	
In-Region, InterLATA Services	)	
in the State of New York	)	

AFFIDAVIT OF STUART MILLER
ON BEHALF OF NEW YORK TELEPHONE COMPANY

STATE OF NEW YORK)
) ss.
COUNTY OF NEW YORK)

Stuart Miller, being duly sworn upon oath, deposes and states as follows:

1. My name is Stuart Miller. I am Assistant Vice-President, Wholesale Market Systems, for NYNEX Information Services, a business unit of NYNEX. In my current position, I am responsible for the development, installation and operation of information systems and operations support systems ("OSS") used in connection with the provision of services offered for resale and unbundled network elements, to resellers and other requesting telecommunication carriers. In addition to the above, I am also responsible for the NYNEX ordering and billing systems supporting the NYNEX New York interexchange

carrier access business, and for marketing support systems which service NYNEX New York's wholesale and retail marketing organizations.

I. PROFESSIONAL EXPERIENCE

2. I have held my current position in NYNEX since September 1994. My appointment as an Assistant Vice President in NYNEX Information Services followed a period of consultancy to NYNEX extending from April 1993. Before my tenure with NYNEX, I had been in the computer systems, software and services industries for 30 years, having spent 17 years with Sperry Corporation in various technical, marketing and general management positions, including that of Vice-President and General Manager of Integrated Office Systems from 1981 to 1984. In 1984, I was appointed Chief Executive Officer of Software AG Systems of North America, a supplier of database software, applications development tools and communications software for mainframe computers. In 1988, I left to become CEO of Cortex Corporation, a supplier of computer applications development tools, and subsequently assumed the CEO position at Linus Technologies, a handwriting recognition software and systems developer. My technical background is in computer programming and project management, specializing in operating systems, real time transaction processing systems and performance optimization.

II. PURPOSE OF AFFIDAVIT

3. The purpose of this Affidavit is to describe NYNEX New York's capabilities to provide resellers and telecommunications carriers requesting unbundled network elements with unbundled, nondiscriminatory access to NYNEX New York's Operation Support System ("OSS") functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing capabilities to support the offering of unbundled network elements ("UNE") and telecommunications services offered for resale ("resale services"). As used in this Affidavit, the term "Local Exchange Carriers" (LEC) refers to both resale customers and customers purchasing UNE.

4. My Affidavit describes NYNEX New York's efforts to support and encourage competition in the local exchange market by offering the new LEC entrants access to complex and important NYNEX New York OSS functions.

III. FUNCTIONAL CAPABILITIES

5. The pre-ordering, ordering, provisioning, maintenance and repair, and billing OSS functions are described more particularly as follows:

- Pre-ordering - provides the LEC with the ability to access information regarding availability of products and services, due date availability, telephone number selection, address validity and customer records prior to placing an order.

- Ordering - provides the LEC with the ability to create and submit a service order.
- Provisioning - provides the work efforts necessary to deploy the ordered product or service.
- Maintenance/Repair - provides the LEC with the ability to report, analyze and resolve trouble reports associated with a specific product and/or service.
- Billing - provides the LEC with billing data and usage data; also facilitates claims and adjustment processing.

IV. LEC ELECTRONIC ACCESS TO OSS FUNCTIONS

6. NYNEX New York offers LECs two basic mechanisms for electronic access to NYNEX New York OSS functions: (i) an electronic gateway known as DCAS, and (ii) separate interfaces utilizing Network Data Mover (NDM), an industry standard protocol.

7. Direct Customer Access System (DCAS) - is an electronic gateway which offers a secure means for providing LECs with access to OSS functionality. Depending on the OSS function involved, DCAS offers one or more of the following electronic formats and protocols to provide LEC access: EIF, Web GUI or EDI.

- Electronic Interface Format (EIF) is a universal data format, utilizing a set of published messages, allowing firms to conduct business with one another. EIF provides LECs with the flexibility to create their own programs or applications to electronically interact with NYNEX New York. EIF is based on the same

message structure, known as NYNEX Message Format (NMF), used internally by NYNEX New York retail operations to access certain OSS functions. NYNEX New York pioneered the development of these message formats and our EIF is currently before the Electronic Communications Implementation Committee (ECIC) (a working committee of the Telecommunications Industry Forum ("TCIF") within the Alliance for Telecommunications Industry Solutions ("ATIS")) as the basis for an industry national standard for a LEC/Incumbent Local Exchange Carrier (ILEC) interface. NYNEX New York's implementation of the EIF interface uses File Transfer Protocol (FTP) to transfer entire files electronically between NYNEX New York and the LEC. In addition, when used to support access to repair and maintenance functions, EIF is compliant with T1M1 data format attributes, a standard recommended by a committee organized under ATIS.

- The Web Graphical User Interface (hereafter known as "Web GUI") is a format based on World Wide Web (WWW) protocol technology. Use of the Web GUI by a LEC to access NYNEX New York functions does not require the LEC to develop its own programs or applications; instead the LEC can utilize commercially available and inexpensive Web Browser software (e.g. Netscape Navigator). NYNEX New York chose a WWW-type interface because such interfaces, like the now familiar Web Pages published by many companies, are generally regarded as easy and effective to use, or "user friendly." The Web GUI, which has been available from NYNEX New York since October 8, 1996, allows

access to basic business data by supplying the LECs with graphical user screens, displayed directly on their desktop computers, to enter and send requests to, and review responses from NYNEX New York's OSSs. Once the business request is transmitted from the Web GUI interface into NYNEX New York for processing, the information is converted into the same EIF messaging interface described above and electronically submitted to fulfill the particular request. Information responsive to the particular request is output from NYNEX New York's OSS(s) and provided back to the LECs via the DCAS gateway, in either EIF or Web GUI formats, as appropriate.

- Electronic Data Interchange (EDI) - is an alternative data format available to LECs operating specifically in the resale environment, and has been available since October 8, 1996. EDI allows reseller LECs to interface directly to the DCAS Gateway and, as further discussed, to submit service orders through DCAS. The current operating protocol is E-Mail transmission via a Value Added Network (VAN). NYNEX New York's implementation of this EDI interface has been submitted to TCIF for consideration as an industry standard.

8. Network Data Mover (NDM). An alternative means of accessing certain NYNEX New York's OSS functions, which does not involve the DCAS Gateway, is via a protocol known as Network Data Mover (NDM). NDM is a well established industry standard protocol for exchanging information within and between telecommunication companies. NYNEX New York has traditionally used NDM as a means for receiving access service

requests (ASRs) from interexchange carriers (IXCs) placing orders for interexchange access services. As further described below, NDM supports ASR messages for order submission as well as BDT (Bill Data Tape) and EMR (exchange message record) message formats for billing and usage data, respectively.

V. PRE-ORDER FUNCTIONALITY

9. As described earlier, pre-ordering functionality is that which allows a LEC to exchange certain information with NYNEX New York OSSs prior to issuance of an order. LEC access to the pre-order functionality is provided via DCAS through either EIF or the Web GUI interfaces. NYNEX New York's offering of pre-ordering functionality falls into the categories listed below. The first six are common to both LEC resale and UNE orders. They are:

- access to Customer Service Records (CSRs);
- access to telephone number selection (i.e., the ability to select and reserve telephone numbers);
- determination of feature availability (i.e., the features and services that are currently available in the end user's central office or for a particular Central Office NXX code);
- due date availability (i.e., the ability to view available due dates);
- address validation (i.e., the ability to determine that a given address is valid and properly expressed);

- Loop Qualification for ISDN (i.e., to determine if line has been conditioned for ISDN functionality).

10. The pre-order functionality unique to UNE are:

- Channel Facility Assignment information (e.g., to view all channels on a T1 or T3 facility to determine working or spare),
- CLLI Code Validation (i.e. to verify the Common Language Location Identifier by State and LEC name)

At present, Loop Qualification for ISDN, Channel Facility Assignment, CLLI Code Validation and access to certain CSRs require some degree of manual processing by a NYNEX New York wholesale representative.

11. The principal NYNEX New York internal systems that support pre-order functionality include:

- PREMises Information System (PREMIS)
- Customer Record Information System (CRIS)
- Business Marketing Expert / Residence Expert Systems (BMEX/REX)
- Service order Management, Administration, Report and Tracking System (SMARTS)
- Trunk Inventory Record Keeping System (TIRKS)
- PHOENIX and/or BRIAN

12. The data made available to LECs in connection with performance of pre-order functions is obtained from the same underlying OSS and databases utilized by NYNEX New York for retail offerings.

VI. ORDERING FUNCTIONALITY

13. After accessing the pre-ordering functions described above, the LEC can generate a service order. A service order is a collection of data concerning an order constructed in a structured format. There are a number of required and optional fields and data elements for service orders which are defined in Bellcore's Uniform Service Order Code ("USOC") format. Additionally, there are a number of "business rules" which must be adhered to for the ordering process to complete successfully. For example, a particular switch may not support a given feature; thus an order requesting the unavailable feature cannot be processed.

14. LECs can submit service orders via DCAS, using EIF or the Web GUI interfaces, and, for reseller LECs, using the EDI interface. In addition, LECs may place orders for certain UNEs using the NDM protocol, as described above. Service Order Processor (SOP) is the principal NYNEX New York internal system whose functions are accessed to support the ordering function. The SOP system executes transactions from LECs with equal priority to those from NYNEX New York retail representatives.

15. At present, most service orders require manual intervention by a NYNEX New York wholesale representative. NYNEX New York is in the process of implementing modifications to reduce the instances where manual intervention is required.

VII. PROVISIONING FUNCTIONALITY

16. LEC access to the provisioning function is provided through the order process described above: The provisioning function includes numerous systems which, based on individual service requirements, assign facilities to an order, update translations in a switch, and determine whether manual processing and/or dispatching a technician are appropriate. As a service order completes each step in the provisioning process, a status is returned for posting on the pending service order. Order requests requiring manual processing are routed to the appropriate workgroup.

17. Provisioning is an extremely complex process. For instance, a single service order for the installation of a simple access line requires switch translations for feature activation, local facility and central office facility assignment, installation requirements, E911 updates, call screening updates, maintenance system updates and billing requirements.

18. The primary systems supporting the provisioning functionality are:

- Service Order Analysis and Control (SOAC)
- Loop Facility Assignment and Control Systems (LFACS)

- Memory Administration for Recent Change History (MARCH) and/or On-Line Provisioning (OLP)
- SWITCH/COSMOS
- Trunk Inventory Record Keeping System (TIRKS)

19. These systems are supplemented by a number of subsystems and manual processing to accomplish provisioning tasks.

VIII. REPAIR AND MAINTENANCE FUNCTIONALITY

20. The functionality required for maintenance and repair are testing, screening (e.g. analysis of the test results to determine if there is a valid trouble), creation of a trouble ticket, dispatch of technicians, report on status, close out of the trouble ticket and review of trouble history.

21. NYNEX New York developed, as part of its DCAS Gateway, the Resale Trouble Administration System (RETAS). Depending on the service involved, RETAS enables LECs to electronically input a trouble report, receive an initial status and an estimated time to repair, as well as modify a report and review a trouble report history. For reseller LECs, RETAS supports automated processing of the above functions. However, NYNEX New York typically receives trouble reports for UNE via E-mail and prints the reports for human review and processing; upgrades to provide full electronic processing are planned. Prior to submission of a trouble report, reseller LECs can, via EIF or the Web GUI, use RETAS to pretest a "POTS" circuit and verify its condition to aid in

customer trouble diagnosis, without NYNEX New York personnel involvement. NYNEX New York plans to have similar testing capability with respect to "special service" circuits available in the near future.

22. The primary internal NYNEX New York systems utilized to support maintenance and repair process are:

- Mechanized Loop Testing System (MLTS)
- DELPHI
- Work Force Administration System (WFA)
- Loop Maintenance Operations System (LMOS)

IX. BILLING FUNCTIONALITY

23. NYNEX New York offers LECs access to usage and billing information to enable LECs to bill their retail customers. NYNEX New York provides a daily feed of relevant usage to each LEC. The LEC has the option of receiving this daily feed either via network, using NDM protocol described above, or on magnetic tape, delivered physically. In both cases, the format used for the usage data conforms to the industry standard Exchange Message Record (EMR) specification. EMR is based on the specifications developed by Bellcore as a result of guidelines issued by the Ordering and Billing Forum Committee of ATIS and is widely used in the telecommunications industry to transmit data of this kind.

24. With respect to NYNEX New York's billing of reseller LECs, the formats used are based on formats agreed to and implemented as a result of the 1996 Collaborative process. The format for the delivery of billing data to the reseller LECs is based on Bill Data Tape (BDT) format, which is also based on Bellcore standards and has been widely used for transmission of billing data for carrier access charges. This formatted data can be received by LEC electronically using the NDM protocol, or optionally by physical delivery on magnetic tape or CD-ROM media.

25. The primary NYNEX New York internal systems used to provide the billing functions to LECs are:

- Customer Record Information System (CRIS)
- Carrier Access Billing System (CABS)

26. CRIS, a legacy system, has been used by NYNEX New York for many years to support billing of its own retail customers. On the other hand, CABS is a relatively new system with sophisticated features. (In October, 1995, CABS replaced an early carrier access billing system which had been used by NYNEX since divestiture to bill IXCs for carrier access charges.) Both CRIS and CABS have been extensively modified to provide billing capabilities in support of the LECs. Most of these modifications were agreed to, specified and developed in accordance with discussions and negotiations brought about during the Collaborative process during 1996.

27. NYNEX New York created a new system, Claims Adjudication Record Management and Adjustment (CARMA), to process LEC reseller claims and adjustments. Further, NYNEX New York developed and has implemented mechanized claims input to CARMA via NDM protocol, although at present no LEC has elected to utilize this capability. CARMA also allows a NYNEX New York wholesale representative to submit a LEC reseller claim in response to a call from the LEC. Interconnection and UNE LECs submit claims in the same manner as existing IXCs and such claims are processed and managed through the current CABS system.

X. LEC COLLATERAL

28. NYNEX New York has provided LECs with the information that they need to configure their systems to access the NYNEX OSS functions as described herein. This information is periodically updated as appropriate. NYNEX New York has also made available training manuals and training programs for LECs that want to purchase its resale services or UNE. NYNEX New York sends experienced personnel to LEC premises to explain its OSS and provides hands-on "walk-throughs" of the service order and other processes. Further, many visits have been made by carriers, including AT&T, MFS and USN to the NYNEX Centers to provide them with an understanding of the NYNEX New York order processing flow.

XI. SYSTEMS CAPACITY

29. In the absence of specific volume projections from LEC's, NYNEX New York has based its initial planning and deployment of system resources on a combination of production experience gained since commencement of resale operations in New York and NYNEX New York's own best estimates of potential LEC (reseller and UNE) business for the near term.

30. For the 4-month period since October 8th, 1996, NYNEX New York's systems have processed orders for approximately 13,900 resold lines. We expect this order rate to increase throughout the year.

31. NYNEX New York is continuing to evaluate and address capacity issues. NYNEX New York has planned hardware and software upgrades which will significantly increase our ability to meet LEC demand. We intend to monitor the performance of the systems which support our reseller and UNE channel and to provide whatever additional hardware and/or software may be appropriate to meet demand. Of course, our ability to meet demand in a timely and cost-effective manner is very much dependent on forecasting information from LECs.

XII. OSS ACCESS COMPARABILITY

32. As further described above, NYNEX New York is providing LECs with access to most NYNEX New York OSS functions via an intelligent "front-end" which includes the